### UTILITY ADVISORY BOARD

### Wednesday, November 14th, 2018 8:00 a.m.

### Water Administration Building AGENDA

- 1. Approval of Minutes September 20, 2018
- 2. Public Comment on Agenda Items
- 3. Adoption of the Water System Advisory Council Policy
- 4. Adoption of Appointments to the Water System Advisory Council
- 5. 2018 Preliminary Water and Sewer Rate Study Presentation
- 6. Biodigestion
- 7. December Meeting Discussion
- 8. Updates
  - a. Monthly Contract Awards September & October- Attached
  - b. WRRF PFOS/PFOAS Update
  - c. Lacks Cascade Update
- 9. Public Comment
- 10. Items from Members
- 11. Next Meeting December 20th, 2018
- 12. Adjournment

### Utility Advisory Board September 20, 2018 8:00 a.m. Minutes

### Call to Order:

**Present:** Tom Almonte, Tim Bradshaw, Nicole Pasch, Jeff Mccaul, Charles Schroeder, Molly Eastman, Sam Giffel, Dave Harran, Wayne Jernberg, Mike Grenier, Mike Lunn, Doug LaFave

Also Present: Izamar Contreras, Jenessa Carter, Brian Vu, Jessica Wood, Amy Snow-Buckner

#### Call to Order

Tom Almonte called the meeting to order at 8:09 a.m.

#### **Public Comment**

None

### **Approval of Minutes**

Motion made by Wayne Jernberg, supported by Tim Bradshaw, to approve the minutes.

MOTION CARRIED.

### **Local Advisory Council**

Wayne Jernberg informed the board about the new State of Michigan's Lead and Copper Rule. These rules will reduce the threshold of allowable lead in drinking water to 12 parts per billion (ppb) by 2025, require full lead service line replacement, modify testing procedures and will require the establishment of a Water System Advisory Council (Council) by the local community water system.

The Council shall be consist of at least nine members and members shall have an interest in or knowledge about lead in drinking water and its effects. At least one member must be a local resident who does not formally represent the interest of any incorporated organization. Wayne will have a formal memo next meeting for the board to approve.

### The Image Shoppe

The Image Shoppe presented the Utility Advisory Board Water/Sewer Campaign. The purpose of the campaign is to facilitate the process for partner communities to connect to public water and sewer services. The campaign will use the "Jessie Persona". The billboards will be place at seven different locations. The campaign timeline is October 2018-April 2019.

### **Updates**

a. Monthly Contract Awards

Jeff McCaul gave an update on July and August bid report.

b. Capital Project Update FY20-24

Wayne Jernberg reminded board members about the October 20<sup>th</sup> capital project deadline. If you have questions, please contact him.

c. Water Distribution Samples

Mike Grenier reported that they received a bad distribution sample in Coopersville. Contact Mike Grenier, if you have any questions.

#### **Public Comment**

None

### **Next Meeting**

October 18th, 2018

### **Update from Members**

Dave Harran gave an update on PFAS that were received from the state in August. Mike Lunn also gave an update on PFAS. Environmental Services is starting to receive samples from industrial sites. Two of those samples are under 12ppt. There is no current local limit. More to come. Molly Eastman gave an update on the Rate Study. Rate Study is underway and next conversation will be about fees and fines. On November 15th, the 2019 Rate Study will be presented to the UAB. The contract extension for the Fourth Extension to the Water and Sanitary Sewer Service Agreements will be sent out for approval. Charles Schroeder informed members that the Wright Township UBB extension is on hold for the time being.

### Adjournment

The Utility Advisory Board was adjourned at 9:01 a.m.

### Water System Advisory Council

The Grand Rapids Water System (water supply) is establishing a Water System Advisory Council (Council) as required by the new state standard for the federal Lead and Copper Rule. Per the 2018 revision to the State of Michigan's Lead and Cooper Rule, "Water Systems that serve a population of 50,000 or more, shall create a Water System Advisory Council". The Council shall operate as followed:

- a) The Council shall consist of at least 8 members, appointed by the Utility Advisory Board and approved by the Grand Rapids City Commission. To be eligible for appointment to the council, an individual shall have an interest in or knowledge about lead in drinking water and its effects. At least one member must be a local resident who does not formally represent the interest of any incorporated organization.
- b) The business that the council performs shall be conducted at a public meeting of the council and held in compliance with the open meetings act, 1976 PA 267, MCL 15.26 to 15.275.
- c) The first meeting of a council shall be called by the water supply. At the first meeting, the council shall elect from its members a chairperson and other officers as it considers necessary.
- d) Council members shall serve 3 year terms with no term limits. After the first meeting, the council shall meet at least annually.
- e) The Council must include a member from each consecutive water supply served that is responsible for reporting out and complying with the State of Michigan's Lead and Copper Rule.
- f) Writing prepared, owned, used, in the possession of, or retained by the council in the performance of an official function is subject to the freedom of information act, 196 PA 442, MCL 15.231 to 15.246.
- g) The Council may independently seek advice, direction, and assistance from the department or the statewide advisory council.
- h) The Council will go into effect immediately after both the appointments are made by the Utility Advisory Board and the Grand Rapids City Commission approves of the appointments.
- i) The council shall do the following:
  - i. Develop plans for continuing public awareness about lead in drinking water, even when the action level is not exceeded.
  - ii. Review public awareness campaign materials provided by the statewide drinking water advisory council to ensure the needs and interests of the community, considering the economic and cultural diversity of its residents, are addressed.

- iii. Advise and consult with the water supply on the development of appropriate plans for remediation and public education to be implemented if a lead action level is exceeded.
- iv. Advise and consult with the water supply on efforts to replace private lead service lines at locations where the owner declines a lead service line replacement.
- v. Assist in promoting transparency of all data and documents related to lead in drinking water within the water supply service area.
- vi. Collaborate with local community groups to ensure that residents have the opportunity to be involved in efforts to educate the community about lead in drinking water.

### CITY OF GRAND RAPIDS AGENDA ACTION REQUEST

DATE:

November 14, 2018

TO:

Utility Advisory Board (UAB) Members

FROM:

Wayne Jernberg, Assistant Water System Manager

SUBJECT:

Water System Advisory Council

In accordance with the State of Michigan's Lead and Copper Rule as well as UAB Policy #18-01, a Water System Advisory Council is required to be established by the local community water system, the City of Grand Rapids (City). It is recommended that the following individuals be approved to serve on the Water System Advisory Council and report (as a subcommittee) to the Utility Advisory Board following their meetings.

- Doug LaFave -- City of East Grand Rapids
- Sara Simmonds Kent County Health Department
- Tom Almonte City of Grand Rapids
- Michael Grenier City of Grand Rapids
- Paul Haan Healthy Homes Coalition
- Wayne Jernberg City of Grand Rapids
- George Haga Ada Township
- Amy Brower- Roosevelt Park Neighborhood Association
- Taylor Devota

All of the individuals listed above meet the qualifications required by the State of Michigan and have agreed to serve on the Council to further improve the quality of drinking water and public health within limits of the Grand Rapids Water System. Additionally, Eric DeLong has been appointed to the statewide Lead Advisory Board.

### CITY OF GRAND RAPIDS AGENDA ACTION REQUEST

DATE:

November 14, 2018

TO:

Utility Advisory Board

FROM:

Molly Eastman, Fiscal Services Manager

Fiscal Services Department

SUBJECT:

2018 Water/Sewer Rate Study - Introduction

A comprehensive review of operating and capital costs by community, in conjunction with customer base variation and usage, is performed annually for the purpose of recommending water and sewer rate adjustments for Grand Rapids and its partner communities. The City of Grand Rapids continues to adhere to its water and sewer rate-setting methodology first established in 1976-77. The methodology yields consistent performance in providing for the long-term financing needs of the Water Supply and Sewage Disposal Systems and assuring adequate debt service coverage pursuant to the Systems' master bond ordinance covenants. This year's review marks the 42<sup>nd</sup> annual water/sewer rate study report.

The City's review of the Water Supply and Sewage Disposal Systems' performance has identified the revenue requirements for water and sewer for calendar year 2019. Water Supply System revenue requirements increased by \$1,156,591 or 2.71% more than revenues generated by existing rates and charges. Sewage Disposal System revenue requirements increased by \$1,734,422 or 3.28% more than revenues generated by existing rates and charges.

Both of the Systems' rate increases are required in part due to continued investment in asset management and infrastructure improvements over the past year. Specifically for the Water System, the investment in the lead service replacement program (City of Grand Rapids impact only), continued improvements at the Lake Michigan Filtration Plant, and a variety of water mains put into service across the system has contributed to the rate increase. For the Sewer System, the assets put into service include work at the Water Resource Recovery Facility for flood protection as well as the aeration system. Routine sewer main work makes up the majority of all other assets being put into the rate base.

During the rate formulation for the Water System, it was discovered that the meter count source report used to project revenue had been overstated. Upon researching this problem, it was evident that the inaccurate meter count had existed in the rate study for many years. This had resulted in projected water revenue being overstated which kept

water rates artificially low. This adjustment has been included in the 2018 Rate Study and the corrected meter count report resulted in a 2.50% rate adjustment. However, this one-time increase is tempered by savings in operation and maintenance expenses as well as the billed volume average increase which is reflective of the system-wide growth over the past few years.

Outside of the system reinvestment, the main driver of the rate increase for the Sewer System is from the growth in operation and maintenance expenses. The Sewer System was able to fill significant vacancies and had increased expenses related to Sewer Maintenance. The rate increase however was moderated by an increase in other revenues such as Sewer Surcharge and integrated connection fees. The increase in three year average of billed volume also helped hold Sewer rates to a conservative increase. In the future, it is expected that completion of the biodigestion project and earnings from the sale of renewable natural gas under the RINS Agreement with DTE will help moderate Sewer rates.

Recommended rate adjustments incorporate provisions of the third amendment to the uniform service agreements with customer communities, which eliminates penalty fee credits from retail revenue requirements to fund the Individual Circuit Breaker (ICB) and the City and Customer Community Circuit Breaker (CCCCB). This amendment generated \$140,923 to support the ICB, the program aimed to assist retail customers requiring assistance in payment of their water/sewer bills. This amount will be supplemented with an additional appropriation of non-operating revenue. The third amendment also provides for a City and Customer Community Circuit Breaker, if sufficient funding is available, to limit each retail service area revenue requirement change to a level in line with the overall systems' initial average change. Adequate funds were available in both utility systems to apply the CCCCB and limit the revenue requirement changes. Total City and Customer Community Circuit Breaker funds used in the 2018 rate study provided \$702,066 in relief.

Attached are detailed schedules by customer community of revenue requirement changes and rate adjustment impacts to a typical domestic and commercial customer with the system average quarterly consumption.

The preliminary 2018 water and sewer rates have been made available to the Utility Advisory Board partners and other customer communities on November 9, 2018. All partner and customer communities have a thirty-day comment period following notification of the rates as provided in the water/sewer service agreements. Approval of the rates by the City Commission is scheduled for Tuesday, December 18, 2018.

The annual rate study along with explanatory materials will be filed with the City Clerk's Office no later than close of business on November 13, 2018, and are available for public review and comment. This is at least twenty (20) days prior to the City Commission's consideration of an approval resolution. Public notice will also be published in the newspaper, and the rate study and supplemental materials have been posted on the City's website at:

https://www.grandrapidsmi.gov/Government/Departments/Water-System/Water-and-Sewer-Rate-Studies

Comments will be reported and considered as part of the FY2020 budget planning process.

Prepared by Molly Eastman

### CITY OF GRAND RAPIDS, MICHIGAN 2018 PRELIMINARY WATER/SEWER RATE STUDY SUMMARY OF REVENUE REQUIREMENT CHANGES FOR RATES EFFECTIVE JANUARY 1, 2019 November 2, 2018

	WATER	R (1)	 SEWER	(1)
	 AMOUNT	PERCENT	AMOUNT	PERCENT
GRAND RAPIDS	\$ 548,029	2.17%	\$ 1,324,832	3.66%
WALKER	117,489	3.63%	68,451	1.48%
KENTWOOD	152,075	3.63%	148,459	3.59%
CASCADE TWP	130,176	3.63%	58,007	2.40%
GRAND RAPIDS TWP	81,885	3.63%	89,109	3.66%
TALLMADGE TWP	3,276	1.61%	(2,484)	-0.56%
WRIGHT TWP	N/A	N/A	9,970	3.66%
EAST GRAND RAPIDS	52,155	6.73%	2,915	0.39%
ADA TWP	38,784	3.07%	22,532	1.79%
OTTAWA COUNTY	37,691	1.72%	NA	NA
GAINES TWP	N/A	N/A	14,911	7.70%
CALEDONIA TWP	N/A	N/A	(2,280)	-1.57%
SYSTEM	\$ 1,156,591	2.71%	\$ 1,734,422	3.28%

<sup>(1)</sup> Change in revenue requirements based on revenues currently generated from rates, customer base and volumes reported in the preliminary rate study (Includes consideration for relief from CCCCB).

### DISCLOSE RELIEF PROVIDED BY CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER (CCCCB)

	WATE	ER .	SEWE	:R
	AMOUNT	PERCENT	AMOUNT	PERCENT
SYSTEM REVENUE REQUIREMENT	\$ 43,868,464	2.71%	\$ 54,611,300	3.28%
ADD: CCCCB RELIEF	394,237	0.92%	307,829	0.58%
LESS: CAPITAL INVESTMENT REIMBU	IRSEMENT		(107,854)	-0.21%
SYSTEM CHANGE- WITHOUT RELIEF	\$ 44,262,701	3.63%	\$ 54,811,275	3.66%

## CITY OF GRAND RAPIDS, MICHIGAN 2018 PRELIMINARY WATER/SEWER RATE STUDY IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS BY CUSTOMER COMMUNITY \* November 2, 2018

	_APPROXIMATE Q	UARTERLY BILL	CHA	NGE
	2018	2019	DOLLARS	PERCENT
GRAND RAPIDS				
WATER	\$ 84.48	\$ 86.28	\$ 1.80	2.13%
SEWER	114.69	119.04_	4.35	3.79%
	\$ 199.17	\$ 205.32	\$ 6.15	3.09%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 82.47	\$ 85.32	\$ 2.85	3.46%
SEWER	131.80	133.55	1.75	1.33%
	\$ 214.27	\$ 218.87	\$ 4.60	2.15%
RATIO TO GR	1.08	1.07		
KENTWOOD				
WATER	\$ 84.72	\$ 87.48	\$ 2.76	3.26%
SEWER	<u>71.03</u>	73.22	2.19	3.08%
	\$ 155.75	\$ 160.70	\$ 4.95	3.18%
RATIO TO GR	0.78	0.78		•
CASCADE TWP				
WATER	\$ 129.81	\$ 134.46	\$ 4.65	3,58%
SEWER	144.71	147.89	3.18	2,20%
	\$ 274.52	\$ 282.35	\$ 7.83	2.85%
RATIO TO GR	1.38	1.38		
GRAND RAPIDS TWP				
WATER	\$ 98.01	\$ 101.40	\$ 3.39	3.46%
SEWER	124.94	129.28	4.34	3.47%
	\$ 222.95	\$ 230.68	\$ 7.73	3.47%
RATIO TO GR	1.12	1.12		
TALLMADGE TWP				
WATER	\$ 108.48	\$ 110.61	\$ 2.13	1.96%
SEWER	283.89	282.06	(1.83)	-0.64%
	\$ 392.37	\$ 392.67	\$ 0.30	0.08%
RATIO TO GR	1.97	1.91		

\* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER

QUARTERLY CONSUMPTION OF: WATER-

27.00 UNITS OR

20,196 GALLONS

SEWER -

19.00 UNITS OR

14,212 GALLONS

NO. OF MONTHS:

3

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP-

SEWER (No. of REU 1.00)

\$ 161.19

\$ 167.10

\$ 5.91

3.67%

## CITY OF GRAND RAPIDS, MICHIGAN 2018 PRELIMINARY WATER/SEWER RATE STUDY IMPACT OF RATE ADJUSTMENTS ON COMMERCIAL USERS BY CUSTOMER COMMUNITY November 2, 2018

	APPROXIMATE Q	UARTERLY BILL	CHA	NGE
•	2018	2019	DOLLARS	PERCENT
GRAND RAPIDS				
WATER	\$ 495.18	\$ 495.21	\$ 0.03	0.01%
SEWER	<u>786.57</u>	800.10	13.53	1.72%
	\$ 1,281.75	\$ 1,295.31	\$ 13.56	1.06%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 427.89	\$ 443.94	\$ 16.05	3.75%
SEWER	673.62	684.33	10.71	1.59%
	\$ 1,101.51	\$ 1,128.27	\$ 26.76	2.43%
RATIO TO GR	0.86	0.87		
KENTWOOD				
WATER	\$ 410.64	\$ 426.54	\$ 15.90	3.87%
SEWER	572.76	593.19	20.43	3.57%
	\$ 983.40	\$ 1,019.73	\$ 36.33	3.69%
RATIO TO GR	0.77	0.79		
CASCADE TWP	<b>.</b>	A 050.07	<b>#</b> 00.00	0.600/
WATER	\$ 634.17	\$ 656.97	\$ 22.80 16.83	3.60% 2.36%
SEWER	714.48	731.31		
	<u>\$ 1,348.65</u>	<b>\$ 1,388.28</b>	\$ 39.63	2.94%
RATIO TO GR	1.05	1.07		
GRAND RAPIDS TWP				
WATER	\$ 492.69	\$ 511.47	\$ 18.78	3.81%
SEWER	625.59	648.06	22.47	3.59%
	\$ 1,118.28	\$ 1,159.53	\$ 41,25	3.69%
RATIO TO GR	0.87	0.90		•
TALLMADGE TWP				
WATER	<b>\$</b> 773.25	\$ 786.27	\$ 13.02	1.68%
SEWER	2,275.62	2,262.03	(13.59)	-0.60%
027727	\$ 3,048.87	\$ 3,048.30	\$ (0.57)	-0.02%
RATIO TO GR	2.38	2.35	Ψ (0.37)	010270
* THE COMPARISONS ABOVE AR QUARTERLY CONSUMPTION OF	F: WATER- 22	5.00 <i>UNITS OR</i> 1	OMER 68,300 GALLONS 59,324 GALLONS	

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP

SEWER (No. of REU 1.00) \$ 161.19 \$ 167.10 \$ 5.91 3.67%

### CITY OF GRAND RAPIDS, MICHIGAN 2018 PRELIMINARY WATER/SEWER RATE STUDY WATER & SEWER RATES FOR GRAND RAPIDS & RETAIL CUSTOMER COMMUNITIES EFFECTIVE JANUARY 1, 2019 November 2, 2018

WATER RATES

					77.	AIER RAI	<u> </u>				 	
	METER CODE	GRAND RAPIDS	<u>v</u>	VALKER	<u>KI</u>	ENTWOOD	<u>,</u>	CASCADE		R. RAPIDS O <u>WNSHIP</u>	LLMADGE <u>OWNSHIP</u>	WRIGHT <u>TOWNSHIP</u>
COMMODITY CHARGE (HC	F)	\$ 1.98	\$	1.70	•	1.58	\$	2.41 SY METER :	,	1.92	\$ 3.38	NA
		 	WO	VINLI SE	L VI	DE CHARG	, E E	T METER.	31Z.E		 	
3/4" & Less	A	\$ 10.94	\$	13.14	\$	14.94	\$	23.13	\$	16.52	\$ 6.45	NA
1"	В	\$ 16.57	\$	20.48	\$	23.68	\$	38.24	\$	26.49	\$ 8.59	NA
1-1/4"	C	\$ 23.81	\$	29.92	\$	34.92	\$	57.67	\$	39.31	\$ 11.34	NA
1-1/2"	D	\$ 32.66	\$	41.46	\$	48.66	\$	81.42	\$	54.98	\$ 14.70	NA
2"	E .	\$ 55.18	\$	70.83	\$	83.63	\$	141.87	\$	94.86	\$ 23.26	NA
3*	F	\$ 119.54	\$	154.74	\$	183.54	\$	314.58	\$	208.82	\$ 47.70	NA
4"	G	\$ 209.64	\$	272.22	\$	323.42	\$	556.37	\$	368.36	\$ 81.92	NA
6" & Over	Н	\$ 467.06	\$	607.86	\$	723.06	\$	1,247.22	\$	824.18	\$ 179.70	NA

SEWER	RΔ	TES

							-11-11 11-11								
	METER	- 1	GRAND								R. RAPIDS		LLMADGE		RIGHT
	CODE	1	RAPIDS	ļ	WALKER	K	<u>ENTWOOD</u>	9	CASCADE	7	OWNSHIP	<u> 7</u>	<u>OWNSHIP</u>	<u>TO</u>	<u>WNSHIP</u>
COMMODITY		•	2.22	•	2.54	œ	2,63	•	2.66	\$	2.38	\$	9.87		NA
CHARGE (HC	;F)	\$	3.33	\$	2.54	Ф	2.03	\$	2.00	Ф	2.30	Φ	9.07		MA
REU Charge (Me	onthly) *		NA		NA		NA		NA		NA		NA	\$	55.70
				МО	NTHLY SE	RVI	CE CHARG	EE	Y METER	SIZI	Ε				
3/4" & Less	Α	\$	18.59	\$	28.43	\$	7.75	\$	32.45	\$	28.02	\$	31.51		NA
1"	В	\$	30.27	\$	47.77	\$	11.00	\$	54.91	\$	47.04	\$	53.24		NA
1-1/4"	C	\$	45.29	\$	72.63	\$	15.18	\$	83.79	\$	71.49	\$	81.18		NA
1-1/2"	D	\$	63.65	\$	103.01	\$	20.29	\$	119.09	\$	101.37	\$	115.33		NA
2"	E	\$	110.38	\$	180.35	\$	33.29	\$	208.94	\$	177.44	\$	202.25		NA
3"	F	\$	243.89	\$	401.33	\$	70.45	\$	465.65	\$	394.77	\$	450.61		NA
4"	G	\$	430.80	\$	710.70	\$	122.47	\$	825.04	\$	699.04	\$	798.31		NA
6" & Over	Н	\$	964.85	\$	1,594.61	\$	271.09	\$	1,851.89	\$	1,568.37	\$	1,791.73		NA

<sup>\*</sup> REU - Residential Equivalent Unit (Wright Township Only)

FIRE PROTECTION RATES	. Ali GOVERNI	MENTAL LINITS

6"	Н	\$ 18.94	10"	J	\$ 52.66
8"	- 1	\$ 33.62	12"	Κ	\$ 75.77

NOTE: Monthly defined as 1/12th of 365 days.

# CITY OF GRAND RAPIDS, MICHIGAN 2018 PRELIMINARY WATER/SEWER RATE STUDY IMPACT OF RATE ADJUSTMENTS ON WHOLESALE CUSTOMER COMMUNITIES EFFECTIVE JANUARY 1, 2019 November 2, 2018

	2018	2019	PERCENTAGE CHANGE
EAST GRAND RAPIDS			
WATER - SERVICE (MONTHLY)	\$14,728.00	\$17,209.00	16.85%
- COMMODITY (100 CF)	\$1.07	\$1.11	3.74%
SEWER - SERVICE (MONTHLY)	\$2,198.00	\$2,243.00	2.05%
- COMMODITY (MG)	\$1,834.00	\$1,840.00	0.33%
ADA TWP			
WATER - SERVICE	\$41,158.00	\$42,811.00	4.02%
- COMMODITY	\$1.22	\$1.25	2.46%
SEWER - SERVICE	\$45,942.00	\$46,008.00	0.14%
- COMMODITY	\$2,288.00	\$2,358.00	3.06%
OTTAWA COUNTY			
WATER - SERVICE	\$414.00	\$445.00	7.49%
- COMMODITY	\$1.17	\$1.19	1.71%
GAINES TWP		<b>4.407.0</b> 0	7.000/
SEWER - SERVICE	\$1,488.00	\$1,605.00	7.86%
- COMMODITY	\$1,549.00	\$1,668.00	7.68%
CALEDONIA TWP			
SEWER - SERVICE	\$719.00	\$752.00	4.59%
- COMMODITY	\$4,587.00	\$4,497.00	-1.96%

NOTE: Monthly defined as 1/12th of 365 days.





DATE: October 23, 2018

TO: Mark Washington, City Manager

COMMITTEE: Community Development Committee
LIAISON: Eric DeLong, Deputy City Manager

FROM: Jeffrey McCaul, Acting City Engineer

**Engineering Department** 

SUBJECT: Resolution approving the third bid package for Water Resource

Recovery Facility Biodigestion for \$39,688,903

The Water Resource Recovery Facility (WRRF) is reaching capacity and staff proactively identified three primary options to address the increased loading demand to the sanitary sewer system:

 Reduce discharge limits on surcharge customers which would adversely impact economic growth and the City's ability to attract new customers.

2. Increase the capacity of WRRF by building a third aeration basin at an estimated investment exceeding 90 to 110 million dollars.

Develop alternate methods to provide treatment services.

The City choose Option 3 and developed a two-phase alternative:

- 1. Provide a pipeline for the discharge of concentrated waste to surcharge customers near the WRRF to reduce and control loadings. This work has been completed, and Founders Brewing Co. and SET Environmental, Inc. were the first two customers to connect.
- Add biodigestion to provide treatment, reduce solids and recover energy.

Biodigestion will produce significant revenue through implementation of a liquid industrial by-product receiving station and by creating Renewable Natural Gas (RNG) using Renewable Identification Numbers (RINS). The City of Grand Rapids will enter into a Memorandum of Understanding with DTE Energy Company to sell the RNG and produce revenues anticipated to generate over \$4 million annually, allowing the City to reach its sustainability goals.

In addition, implementing biodigestion will stabilize the revenue requirements of the sewer system going forward by reducing current biosolids by approximately 30%,

minimizing struvite by capturing phosphorus (a limited resource) and providing heat and electricity at a long term known cost.

On August 15, 2017 (Proceeding No. 86965), the City approved a Professional Services Agreement with The Christman Company (Christman) for construction management services in connection with the Biodigestion with Combined Heat and Power project at the Water Resource Recovery Facility (WRRF). The project was procured in three bid packages. The first two have been previously awarded (Proceeding No. 87226 & Proceeding No. 87501) and construction is underway.

The third, and largest, bid package, bid June 19, 2018, included structural steel, mechanical (including HVAC and plumbing), electrical (including generators and instrumentation), tank and foundation waterproofing, painting, steel tanks, and process equipment. The construction estimate for the third bid package prepared by Christman is \$28,172,449 and the bids received totaled \$46,536,097. Christman solicited Micro Local Business Enterprise (MLBE) vendors through direct outreach and with their bid documents, however Christman will not be utilizing any MLBE participation in this bid package.

Due to refined design, changes in the market, final equipment specifications, and completed bid packages, the final bid package put the overall project \$18 million over the original construction estimate. The majority of the overage was in the mechanical, electrical, generators, and instrumentation bid categories. Staff worked with the construction manager and through value engineering reduced the gap from \$18 million to \$9.3 million. Staff reviewed and has adjusted the five-year capital plan to accommodate a portion of the additional capital cost. Additionally, after applying the revenue from the sale of RNG the Sewer Fund will remain financially strong with no negative impact on rates.

The attached resolution provides authorization of expenditures to the Professional Services Agreement with Christman for the third biodigestion bid package in the amount of \$39,688,903 with total expenditures not to exceed \$57,286,593. This amount includes the professional services agreement, materials testing services, administration, an approximate five percent allowance for contingencies, and previously authorized services.

This project is being financed by the Sewer System Fund. A budget request in the Sewer System Fund is necessary to fund a portion of this project. It is anticipated that a portion of funds will be financed through the issuance of future bonds previously approved by the City Commission for this project.

cc: Jana Wallace Molly Eastman Mike Lunn

### **SUMMARY OF ESTIMATED COSTS**

for

### Construction Management Services in connection with Biodigestion with Combined Heat and Power at the Water Resource Recovery Facility (WRRF)

#### **Project Funding Source(s)** Revised Project Budget Currently Estimate Request(s) <u>Approved</u> Sewer System Revenue Bonds Series \$17,591,801 \$26,812,150 \$44,403,951 2017 6,000,000 6,000,000 Sewer System Revenue Bonds Series 2019 0 6,882,642 6,882,642 Sewer System Fund \$17,591,801 \$39,694,792 \$57,286,593 **Total Project Sources Breakdown of Project Uses** \$39 688 903 Professional Services Agreement

Materials Testing Administration	\$8,500 992,223
Sub-Total	\$40,769,626
Contingencies (5%)	2,038,481
Sub-Total	\$42,808,107
Prior Authorization (Proceeding No. 86965) Prior Authorization (Proceeding No. 87226) Prior Authorization (Proceeding No. 87501)	2,611,891 4,771,343 7,095,252
Total Project Uses	\$57,286,593

YOUR COMMUNITY DEVELOPMENT COMMITTEE recommends adoption of the following resolution authorizing expenditures to the Professional Services Agreement in connection with the Biodigestion with Combined Heat and Power at the Water Resource Recovery Facility.

### WHEREAS:

1. On August 15, 2017 (Proceeding No. 86965), the City approved a Professional Services Agreement with The Christman Company (Christman) for the following project:

Biodigestion with Combined Heat and Power at the Water Resource Recovery Facility (hereinafter referred to as the "Project"); and

- 2. On November 28, 2017 (Proceeding No. 87226) the City increased expenditures; and
- 3. On March 6, 2018 (Proceeding No. 87501) the City increased expenditures; and
- 4. It is necessary to increase the scope of work and authorize expenditures for the aforesaid agreement; therefore

#### RESOLVED:

- 1. That the bid package three expenditures for the Professional Services Agreement with Christman, be authorized at a cost of \$39,688,903 with total expenditures not to exceed \$57,286,593 which includes the costs of the professional services agreement, material testing, administration, contingencies and previously authorized services. Said amount of \$57,286,593 to be charged to the applicable codes currently defined as follows: \$44,403,951 to Code No. 5907-527-9000-9880-590717125, \$6,000,000 to Code No. 5908-527-9000-9880-590817125, and \$6,882,642 to Code No. 5911-527-9000-9880-591117125; and
- 2. That the City Engineer or his designee is hereby authorized to execute the necessary change order to the aforesaid agreement with Christman in a form approved by the City Attorney; and
- 3. That the City Comptroller is hereby authorized and directed to make payment, in amounts and to said payees, as the City Engineer or his designee requests in connection with the Project; and
- 4. That the City of Grand Rapids, pursuant to Section 1.150-2 of the Treasury Regulations promulgated pursuant to the Internal Revenue Code of 1986, as amended, declares its intent to reimburse itself the costs of the Project and other related costs in an amount not to exceed \$57,286,593 (Sewer System Fund) through the issuance of tax-exempt bonds; and

5. That a copy of this resolution be available for inspection at the City Clerk's Office, 2nd Floor, City Hall, 300 Monroe Avenue N.W., Grand Rapids, Michigan 49503.

Prepared by Kristin Pfauth

CORRECT IN FORM

DEPARTMENT OF LAW

# Water/Sewer UAB Report September 2018

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Project Name	Contractor	Award Date	Substantial Completion Date	Final Completion Date	Water Fund Authorized NTE Amt	Sewer Fund Authorized NTE Amt	Est. Year for Rates	Integrated (Y/N)
Storm Sewer Improvements at the LAKE MICHIGAN FILTRATION PLANT (North Reservoir)	Diversco Construction 9/11 Company Inc	9/11/2018	11/19/18	12/10/18	\$349,630	NVA	2019	<b>&gt;</b>
South Plant Actuators, Activated Sludge Pump Replacement, and Evaluation of Return Activated Sludge (RAS) at the WATER RESOURCE RECOVERY FACILITY	Franklin Holwerda Company	9/11/18	8/21/19	9/21/19	<b>VIV</b>	\$ 1,292,894.00	2020	>
Improvements to the ALGER PUMP STATION	Davis Construction Inc	9/18/18	5/10/19	5/24/19	\$3,465,760	N/A	2020	À

# Water/Sewer UAB Report October 2018

Project Name	Contractor	Award Date	Substantial Completion Date	Final Completion Date	Water Fund Authorized NTE Amt	Sewer Fund Authorized NTE Amt	Est. Year for Rates	Integrated (Y/N)
South Primary Control Building Interior Renovations at the WATER RESOURCE RECOVERY FACILITY	Wolverine Building Group Inc	10/9/18	1/15/19	1/31/2019	NA	\$ 373,165.00	2020	×
Construction of Fill Chamber at LIVINGSTON RESERVOIR	Davis Construction Inc	10/23/2018	4/26/2019	5/20/2019	\$ 1,090,500.00	N/A	2020	N (GR, KTW, Cascade, GRT, EGR, Ada)
Improvements to Yard Piping (North Finals) at the WATER RESOURCE RECOVERY FACILITY	Diversco Construction Company Inc	10/23/18	12/14/18	12/28/18	N/A	\$ 451,110.00	2019	>